

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 7

REMARKS

The following remarks are respectfully submitted in response to the Office Action mailed January 11, 2006. Claims 1-26 are pending in this application. Claim 1 has been amended to correct a typographical error and to state that the cherries being infused are the rinsed cherries. Dependent claim 12 has been amended to state that the cherries are infused for about 6 to about 15 hours. Applicants believe support for this amendment can be found in the specification at paragraphs 0016 and 0018. Independent claim 23 has been amended to claim a process for converting brined cherries to black sweet cherry products. Support for this amendment can be found in the specification in Examples 3 and 4 at paragraphs 0019-0021. Applicants do not believe any new matter has been added. Reconsideration of the application as amended is requested.

Applicants are aware of their obligation under 37 C. F. R. 1.56 regarding inventions made by each inventor. The invention claimed in each claim of the application was commonly owned by the assignee of this application at the time the invention was made.

In the Office Action, the Examiner has rejected all of the pending claims, claims 1-26, under 35 U.S.C. §103(a) as unpatentable over U.S. Statutory Invention Registration No. H1014 to Kraut et al. in view of Japanese Patent No. JP 60078536 to Hirotomo, U.S. Patent No. 4,350,711 to Kahn et al., U.S. Patent No. US 6,479,092 B1 to Wettlaufer, and U.S. Patent No. US 6,254,919 B1 to Phillips.¹

¹ Applicants understand the current rejection(s) as the following:

- Claims 4-7, 12-14, 20, 24 and 26 are rejected under 35 U.S.C. §103(a) as unpatentable over Kraut et al. alone (*see* Office Action, pars. 6, 7, 9, 14, 17 and 18);
- claims 22 and 25 are rejected under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Hirotomo (*see* Office Action, par. 16);
- claims 2, 3, 8, 9, 15 and 16 are rejected under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Kahn et al. (*see* Office Action, pars. 5, 8 and 10);
- claims 10 and 11 are rejected under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Wettlaufer (*see* Office Action, par. 11); and
- claim 19 is rejected under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Phillips (*see* Office Action, par. 13).

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 8

The following paragraphs summarize the Applicants understanding of the substance of the current rejections. The Examiner has rejected claims 1², 6, 7 and 12 under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Hiroto. In the Examiner's opinion, Kraut et al. disclose a method of making cherries which includes the steps of providing brine cherries, for example, whole cherry fruit and fruit pieces; bleaching the cherries to lower the level of residual sulfur dioxide to 100 parts per million (ppm) or less; adding flavor and sugar; drying the cherries in order to maintain only a minimum of free syrup.

The Examiner admits that Kraut et al. fail to disclose freezing the cherries in water. However, in the Examiner's opinion, this element of the claimed invention is disclosed in Hiroto. More specifically, in the Examiner's opinion, Hiroto teaches a fruit, such as a cherry, having a high sugar content. The fruit is washed with water, drained, and then quickly frozen to prevent fruit pulp damage. The Examiner asserts that it would have been obvious to modify Kraut et al. with the teaching of Hiroto because freezing the cherries would prevent pulp damage.

The Examiner has rejected claims 2-5, 8, 9 and 15 under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Hiroto and U.S. Patent No. 4,350,711 to Kahn et al. The Examiner admits that Kraut et al. do not disclose the temperature of the cherry juice in the infusion bath, infusing the brined cherries with red cabbage or red tart cherry juice, or the moisture content of the dried cherries. However, the Examiner states that Kahn et al. teach a method of infusing fruits, such as cherries, with sugar solids in infusion baths at a temperature of about 45° F to about 120° F and drying the infused fruits to a moisture content of about 15-28% to improve microbiological stability. In the Examiner's opinion, it would have been

In responding to this Office Action, Applicants address the rejections of dependent claims as including the specific individual references discussed by the Examiner used in combination with the cited references of any previous claim to render the dependent claim obvious. For example, in the case of the rejection of claim 24 at paragraph 17 of the Office Action, Applicants have assumed the rejection under 103 is based on Kraut et al., Khan et al., and Phillips.

² The Examiner states that using cherry juice or any other type of flavor in the infusions bath does not involve an inventive step because the flavor depends on consumer preference. An "inventive step" is an international standard and not the appropriate test to be applied to this claim. Applicants respectfully submit that the appropriate test in the United States is whether the claimed subject matter would have been obvious to one of ordinary skill in the art at the time the application was filed.

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 9

obvious to modify Kraut et al. with the teachings of Kahn et al. by having cherries with reduced moisture content in order to improve microbiological stability.

The Examiner has rejected claims 10, 11, 13, 14 and 16 under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Hiroto, Kahn et al. and U.S. Patent No. 6,479,092 B1 to Wettlaufer. The Examiner admits that Kraut et al. fail to disclose the water activity of the dried cherries. In the Examiner's opinion, Wettlaufer teaches a method for infusing fruit such as cherries, where a water activity range of 0.4-0.64 is desirable for good storage life of the product. Thus, the Examiner concludes that it would have been obvious to modify Kraut et al. with the teachings of Wettlaufer by producing cherries having a water activity in this range to obtain good storage life.

The Examiner has rejected claims 17-22³ and 25 under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Hiroto, Kahn et al. and U.S. Patent No. 6,254,919 B1 to Phillips. The Examiner admits that Kraut et al. also fail to disclose infusing in a two step process. The Examiner states that the infusion process of Kahn et al. may be limited to the use of two infusion baths, so long as the about 32-55% water soluble solids content is reached in the fruit. The Examiner admits that Kahn et al. fail to disclose the time required to perform the infusion process. However, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to use a high Brix infusion bath to reduce the time required for the infusion process.

The Examiner also admits that Kraut et al. fail to disclose a pasteurizing step or pasteurizing temperature. In the Examiner's opinion, Phillips teaches a method of preparing shelf-stable fruit, such as cherries, by immersing fruit in a bath of sugar syrup and then drying with hot air at a temperature effective for pasteurization. The Examiner states that Phillips discloses pasteurizing at an effective temperature of about 176° F to about 203° F. The Examiner asserts that it would have been obvious to modify Kraut et al. with the disclosure of Phillips to use a pasteurizing step at a temperature within 176° F to 203° F to impart stability of the product.

³ In paragraph 12 of the Office Action, the Examiner states that using red cabbage juice would not involve an inventive step. Applicants respectfully submit that application of the "inventive step" standard to claims 17 and 18 is not appropriate here.

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 10

The Examiner has rejected claims 23⁴, 24, and 26 under 35 U.S.C. §103(a) as unpatentable over Kraut et al. in view of Kahn et al. and Phillips as discussed above.

In Response to the above rejections, Applicants respectfully submit that under current United States law, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. MPEP 2143; *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Regarding the rejections of claims 1-20, 22, and 25, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. The cited references as combined fail to teach or suggest all of the claim limitations is one reason the Examiner has failed to establish a *prima facie* case of obviousness. As admitted by the Examiner, Kraut et al. do not teach or suggest freezing the cherries in water. (Office Action mailed January 11, 2006 at p. 3). Applicants have not been able to locate disclosures of this element of the claims in any of the other cited references. As Applicants understand the present rejection, in the Examiner's opinion, this deficiency is supplemented by Hiroto. However, Hiroto does not disclose freezing in water. To the contrary, Hiroto discloses a process for preparing individually quick frozen (IQF) raw fruit which prevents the fruit from pulp damage. (Sinha Decl., ¶ 6). Specifically, Hiroto discloses raw fruit having high sugar content without the use of a warming or heating process to prevent fruit pulp from damage. The fruit is raw, not brined, and is washed with water and then frozen. Moreover, in Hiroto, the fruit utilized is frozen, but the fruit is not frozen in water as presently claimed, nor does Hiroto suggest freezing the cherries in water, as it specifically teaches to rinse the fruit and then freeze the fruit. Applicants similarly believe that the remaining references also do not disclose freezing the cherries in water.

⁴ In paragraph 16 of the Office Action, the Examiner also applies the "inventive step" standard to claim 23 as it

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 11

Claims 1-20, 22, and 25 all require freezing the cherries in water. As discussed in Applicants' specification, freezing the cherries in water softens the firm tissue of the brined cherries, facilitates removal of sulfur and coloring, and aids infusion of the cherries to a higher Brix level. (Specification, par. 0009). The Examiner asserts that it would have been obvious to modify Kraut et al. with the teaching of Hiroto because freezing the cherries would prevent pulp damage. Even assuming this is true, as discussed in the specification at paragraph [0009], in the claimed process, freezing the cherries in water softens the firm tissue of the brined cherries and facilitates removal of sulfur during rinsing. Thus, freezing the cherries in water would not prevent pulp damage to the cherries. (Sinha Decl., ¶ 7). Accordingly, one of ordinary skill in the art would not have been motivated to modify Kraut et al. with Hiroto because the process of Hiroto would not soften the firm tissue of the brined cherries. As discussed above, none of the cited references disclose freezing the cherries in water, and thus, do not teach or suggest all of the claim limitations. Accordingly, for at least this reason, Applicants respectfully submit that claims 1-20, 22, and 25 are in condition for allowance.

Independent claim 23 has been amended to claim a process for converting brined cherries to black sweet cherry products. Support for this amendment can be found in the specification in Examples 3 and 4 (pars. 0019-0021). None of the cited references, alone or in combination, teach or suggest a method for converting brined cherries to black sweet cherry products. Additionally, the Examiner admits that "Kraut et al is silent as to adding lemon juice, however, it would be obvious to one of ordinary skill in the art to modify Kraut et al with the teachings of Phillips and Kahn et al by utilizing any flavoring agent such as lemon juice or natural black sweet cherry flavor as recited by applicant." The addition of lemon juice, as opposed to merely a lemon flavorant, changes the Brix to acidity ratio of the infused cherries such that the infused cherries more closely mimic the natural taste of black sweet cherries. (Sinha Decl., ¶ 8). Applicants respectfully submit that it is only through hindsight that one of ordinary skill would have been led to add about 1% lemon juice to the stabilization syrup, which is added to a first bath to form a second bath. Accordingly, independent claim

relates to the use of red cabbage juice as a colorant.

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 12

23 as amended and dependent claims 24-26, which directly depend from claim 23, are patentable over the cited references.

Regarding the rejection of claim 12, the Examiner asserts that Kraut et al. disclose that the entire process was accomplished in less than five days and references claims 4 and 5 of Kraut et al. However, Kraut et al. claim that "all of said *immersions* are accomplished in less than about" 5 days (claim 4) and 2 days (claim 5). (*Emphasis added*). The time period claimed in claims 4 and 5 of Kraut et al. is for the immersion step of the method of claim 1 only and not the entire process of making cherries of the maraschino type. Applicants believe that the remaining process steps disclosed in Kraut et al., such as leaching sulfur compounds (col. 3, lines 40-53) and boiling (col. 5, lines 52-54), would take at least another five days. (Sinha Decl., ¶ 9). As shown in Examples 1 and 2 of Applicants' specification at paragraphs [0016] and [0018], the rinsed cherries may be infused for about 6 hours to about 15 hours, respectively. This time is significantly less time than the "less than about 5 days" claimed in Kraut et al. Claim 12 has been amended to state that the cherries are infused for from about 6 to about 15 hours. Accordingly, for at least the two reasons discussed above, claim 12 as amended is in condition for allowance.

Claims 21 and 22 require soaking the cherries for about 2 hours in a first infusion juice comprising a Brix of about 68 and then soaking the cherries for about 4 hours in a second infusion juice comprising a Brix of about 68. The Examiner asserts that Kraut et al. disclose that the entire process was accomplished in less than five days and references claims 4 and 5 of Kraut et al. The Examiner admits that Kraut et al. do not disclose freezing the cherries and infusing in a two step process. The Examiner relies on Hiroto and Kahn et al. to provide the missing teachings. In particular, the Examiner relies on Kahn et al. in asserting that it would have been obvious to infuse in a two step infusion bath process. The Examiner admits that "Kahn et al. is silent as to the period of time this takes. However, it would be expected that the greater the level of Brix in the infusion bath, the lesser the amount of time needed for infusion. It would be obvious to one of ordinary skill in the art to utilize a high Brix infusion bath for the product to reduce time." However, this premise is not true. Infusion is a process by which water is forced out of the fruit and replaced by the soluble solids of the infusion bath

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 13

(Sinha Decl., ¶ 10). The greater the Brix level of an infusion bath, the greater the amount of soluble solids in the infused fruit (Sinha Decl., ¶ 11) and the higher the final Brix of the infused fruit. (Sinha Decl., ¶ 11). This is not merely a matter of infusing at a faster rate, but rather to a higher soluble solids content, which is not disclosed or suggested by the cited reference. Thus, it would not be obvious to one of ordinary skill in the art to use a high Brix infusion bath merely to achieve a reduced infusion time. Accordingly, Applicants respectfully submit that claims 21 and 22 would not have been obvious over the combination of cited art.

Applicants respectfully contend that the basis for all claims rejected under 35 U.S.C. §103 over Kraut et al. in view of Hiroto, Kahn et al., Wettlaufer and Phillips are merely a hindsight reconstruction of Applicants' own invention, using Applicants' invention as a template to piece together prior teachings. The Court of Appeals for the Federal Circuit has ruled that to impart to one of ordinary skill in the art knowledge of the invention, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome, wherein that which only the inventor taught is used against its teacher. *W.L. Gore and Associates, Inc. v. Garlock Inc.* 721 F.2d 1540, 1553 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

The Court of Appeals for the Federal Circuit has held that "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. The mere identification in the prior art of each claim element is insufficient to defeat the patentability of the combined subject matter as a whole. *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). Under §103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." *In re Fritch* 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1983). The court further stated, "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. *Id.* One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *Id.* at 1784.

The mere fact that references can be combined or modified does not render the resulting combination obvious unless the prior art also suggests the desirability of the

Applicants : Nirmal K. Sinha et al.
Appln. No. : 10/624,225
Page : 14

combination. Applicants respectfully submit that the references cited by the Examiner do not suggest the desirability of the combination proffered by the Examiner in this case or provide a reasonable expectation of success based upon the prior art.

For at least the reasons discussed above, Applicants respectfully submit that there is no such suggestion or motivation found in the references. For at least the reasons discussed above, the references of record, taken singly or in any combination, do not teach or suggest the claimed processes as set forth in independent claims 1, 17, 21, 23, and the claims that depend from them. Accordingly, Applicants respectfully submit that all of the presently pending claims are in condition for allowance.

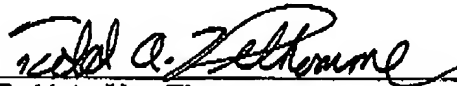
Applicants have made a concerted effort to the place this application in condition for allowance. If the Examiner believes there are any additional informalities, the courtesy of a telephone call to Applicants' attorney would be sincerely appreciated. If the Examiner feels that a telephone interview would be helpful, Applicants' attorneys are more than happy to schedule one at the Examiner's convenience. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

NIRMAL K. SINHA ET AL.

By: PRICE, HENEVELD, COOPER,
DEWITT & LITTON, LLP

4/11/2006
Date


Todd A. Van Thomme
Registration No. 44 285
Price, Heneveld, Cooper, DeWitt & Litton, LLP
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610

TAV/LRH/cmu/jrf